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Name of Work	:	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	23-12-2019
Type of Mix	:	Tack coat
Sample I/D	:	7

DETERMINATION OF RATE OF SPREAD TACK COAT			
Determination	**Unit**	**Test No**	
		1	**2**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.788	0.775
Final weight of plate after application of tack Coat (c)	Kg	0.811	0.798
Weight of tack Coat (d=c-b)	Kg	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.251	0.254
Average	Kg/sq.m	0.253	
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**	

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Consultants Representative

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Name of Work	:	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	23-12-2019
Type of Mix	:	Tack coat
Sample I/D	:	7

DETERMINATION OF RATE OF SPREAD TACK COAT

Determination	**Unit**	**Test No**	
		1	**2**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.886	0.778
Final weight of plate after application of tack Coat (c)	Kg	0.909	0.801
Weight of tack Coat (d=c-b)	Kg	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.251	0.251
Average	Kg/sq.m	0.251	
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**	

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GRADATION FOR BC
(As per MORT&H 500-18,Grading-2)

Name of Work	:	Package-10.1. Construction of anganawadi building at Kogilu in ward no.05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant	:	M/s Tejus Consultants
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	29.07.2020
Type of Mix	:	BC
Sample I/D	:	BC4

Sample Location:	At plant	Date of Sampling:	23-12-2019
Type of material & Purpose:	BC	Date of testing:	23-12-2019
		Oven Dry Wt.(gms):	1200.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	146	146.0	12.17	87.83	79 - 100
9.50	132	278.0	23.17	76.83	71 - 95
4.75	208	486.0	40.50	59.50	53 - 71
2.360	105	591.0	49.25	50.75	42 - 58
1.180	128	719.0	59.92	40.08	34 - 48
0.600	130	849.0	70.75	29.25	26 - 38
0.300	108	957.0	79.75	20.25	18 - 28
0.150	86	1043.0	86.92	13.08	12 - 20
0.075	50	1093.0	91.08	8.92	4 - 10
Pan	107.0	1200.0			
Total	1200.0				

Note:
1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory/Site.
3. Any Query regarding the report must be reported reported within 15days from the date of testing.

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Project	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.R Ramshankar Reddy

AGGREGATE IMPACT VALUE (IS: 2386 Part - 4)

Proposed Use	DBM	**Date of Sampling**	**29-12-2019**
Sample Location	At plant	**Date of Testing**	**29-12-2019**

Sl. No.	Description		Test No. 1	Test No. 2	Test No. 3	Spec Limit (%)
1	Wt. of stone pieces (dry) passing IS Sieve 12.5mm but retained in IS sieve 10mm (gm)	(Wa)	392.00	376.00	352.00	
2	Wt. of the fraction retained in IS sieve 2.36mm after the impact test (gm)	(Wb)	298.00	288.00	268.00	
3	Wt. of the fraction passed in IS sieve 2.36mm after the impact test (gm)	(Wc)	94.00	88.00	84.00	
4	Aggregate Impact Value (%)	(Wc/Wa)*100	23.98	23.40	23.86	
5	Average Aggregate impact value	(%)	23.75			Max - 30 %

Remarks : Satisfactory / Not Satisfactory

AE

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Project	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division. 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakarunthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.R Ramshankar Reddy

FLAKINESS AND ELONGATION INDICES (IS 2386, PART I)

Type of Material		DBM		**Proposed Use**	DBM
Sample Location		At plant		**Date of Sampling**	29-12-2019
				Date of Testing	29-12-2019
Size of aggregate		**Flakiness Index**		**Elongation Index**	
Passing through IS sieve, mm	**Retained on IS sieve, mm**	**Total wt. of aggregate retained on sieves (A) gms.**	**Wt. of aggregate passing from Flakiness gauge (B) gms**	**Wt. of aggregate retained on Flakiness gauge (C) gms**	**Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms**
63.0	50.0	0	0	0	0
50.0	40.0	0	0	0	0
40.0	31.5	7860	672	7022	372
31.5	25.0	4244	208	3582	298
25.0	20.0	2422	272	1994	226
20.0	16.0	1522	346	988	264
16.0	12.5	564	108	462	178
12.5	10.0	480	56	262	96
10.0	6.3	134	90	85	58
Total		**17226**	**1752**	**14395**	**1492**

Results

Flakiness Index(%):	10.17	
Elongation Index(%):	10.36	
Combined FI+EL (%)	20.54	

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Name of Work	:	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	30-12-2019
Type of Mix	:	DBM
Sample I/D	:	DBM-2

GRADATION FOR DBM

(As per MORT&H 500-10,Grading-2)

Sample Location:	At plant	**Date of Sampling:**	30-12-2019
		Date of testing:	30-12-2019
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	1500.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0	0	0.00	100.00	100.00
26.50	92	92	6.13	93.87	90-100
19.00	122	214	14.27	85.73	71-95
13.20	242	456	30.40	69.60	56-80
4.750	320	776	51.73	48.27	38-54
2.360	186	962	64.13	35.87	28-42
0.300	262	1224	81.60	18.40	7-21
0.075	198	1422	94.80	5.20	2-8
Pan	78	1500			
Total	1500.0				

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BITUMEN CONTENT AND GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM MIX

Name of Work	:	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Brohat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	30-12-2019
Type of Mix	:	DBM
Sample I/D	:	DBM-2

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	840	922
2. Weight of Mixture after extraction, g	804	882
3. Weight of Bitumen	36	40
4. Weight of filter paper before extraction, g	2.00	2.00
5. Weight of filter paper after extraction, g	4.00	4.00
6. Weight of fines, g	2.00	2.00
7. Weight of Bitumen & fines	38.00	42.00
8. Bitumen content in %	4.52	4.56
9. Average Bitumen content in %	4.54	
10. Minimum Bitumen content in %	4.50	

GRADATION FOR DBM AFTER EXTRACTION

(As per MORT&H 500-10,Grading-2)

Sample Location:	At site	**Date of Sampling:**	30-12-2019
		Date of testing:	30-12-2019
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	804

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0.0	0.0	0.00	100.00	100.00
26.50	42.0	42.0	5.22	94.78	90-100
19.00	122.0	164.0	20.40	79.60	71-95
13.20	103.0	267.0	33.21	66.79	56-80
4.750	162.0	429.0	53.36	46.64	38-54
2.360	102.0	531.0	66.04	33.96	28-42
0.300	152.0	683.0	84.95	15.05	7-21
0.075	88.0	771.0	95.90	4.10	2-8
Pan	33.0				
Total	804.0				

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Name of Work	:	Package-10.1. Constraction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	30-12-2019
Type of Mix	:	Tack coat DBM
Sample I/D	:	3

DETERMINATION OF RATE OF SPREAD TACK COAT

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x 0.30
Area of Plate (a)	Sq.mtr	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.746	0.732
Final weight of plate after application of tack Coat (c)	Kg	0.769	0.755
Weight of tack coat (d=c-b)	Kg	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.254	0.254
Average	Kg/sq.m	0.254	
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**	

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Project	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.R Ramshankar Reddy

AGGREGATE IMPACT VALUE (IS: 2386 Part - 4)

Proposed Use	BC	**Date of Sampling**	**30-12-2019**
Sample Location	At plant	**Date of Testing**	**30-12-2019**

Sl. No.	Description		Test No. 1	Test No. 2	Test No. 3	Spec Limit (%)
1	Wt. of stone pieces (dry) passing IS Sieve 12.5mm but retained in IS sieve 10mm (gm)	(Wa)	346.00	370.00	365.00	
2	Wt. of the fraction retained in IS sieve 2.36mm after the impact test (gm)	(Wb)	266.00	284.00	278.00	
3	Wt. of the fraction passed in IS sieve 2.36mm after the impact test (gm)	(Wc)	80.00	86.00	87.00	
4	Aggregate Impact Value (%)	(Wc/Wa)*100	23.12	23.24	23.84	
5	Average Aggregate impact value	(%)	23.40			Max - 30 %

Remarks : ✓ Satisfactory / Not Satisfactory

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Project	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.R Ramshankar Reddy

FLAKINESS AND ELONGATION INDICES (IS 2386, PART I)

Type of Material	BC		**Proposed Use**	BC
Sample Location	At plant		**Date of Sampling**	30-12-2019
			Date of Testing	30-12-2019

Size of aggregate		**Flakiness Index**		**Elongation Index**	
Passing through IS sieve, mm	**Retained on IS sieve, mm**	**Total wt. of aggregate retained on sieves (A) gms.**	**Wt. of aggregate passing from Flakiness gauge (B) gms**	**Wt. of aggregate retained on Flakiness gauge (C) gms**	**Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms**
63.0	50.0	0	0	0	0
50.0	40.0	0	0	0	0
40.0	31.5	0	0	0	0
31.5	25.0	0	0	0	0
25.0	20.0	0	0	0	0
20.0	16.0	924	88	940	60
16.0	12.5	1362	116	1246	124
12.5	10.0	534	76	445	70
10.0	6.3	496	64	416	58
Total		**3316**	**344**	**3047**	**312**

Note: Minimum 200 Pcs should be taken on each fraction of test

Flakiness Index(%):	10.37
Elongation Index(%):	10.24
Combined FI+EL (%)	20.61

Representative

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GRADATION FOR BC
(As per MORT&H 500-18,Grading-2)

Name of Work	:	Package-16.1. Construction of anganawadi building at Kogilu Layout ward No.05 byatarayanapura sub division. 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division. 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 06 Byatarayanapura Sub division.
Client	:	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant	:	M/s Tejus Consultanta
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	03.08.2020
Type of Mix	:	BC
Sample I/D	:	BC5

Sample Location:	At plant	Date of Sampling:	31-12-2019
Type of material & Purpose:	BC	Date of testing:	31-12-2019
		Oven Dry Wt.(gms):	1200.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	140	140.0	11.67	88.33	79 - 100
9.50	124	264.0	22.00	78.00	71 - 95
4.75	228	492.0	41.00	59.00	53 - 71
2.360	122	614.0	51.17	48.83	42 - 58
1.180	114	728.0	60.67	39.33	34 - 48
0.600	146	874.0	72.83	27.17	26 - 38
0.300	98	972.0	81.00	19.00	18 - 28
0.150	70	1042.0	86.83	13.17	12 - 20
0.075	50	1092.0	91.00	9.00	4 - 10
Pan	108.0	1200.0			
Total	1200.0				

Note:
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2. The results indicated above are based on the tests carried out on the samples received in the laboratory/Site.
3. Any Query regarding the report must be reported reported within 15days from the date of testing.

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BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

Name of Work	:	Package-10.1: Construction of anganawadi building at kogilu in ward no03 byatarayanapura sub division, 2 Improvements of roads and drains at Ward No.03 to Ward No.06 and 07 connecting roads in Ward No.03 Byatarayanapura Sub Division 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 03 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 03 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	31-12-2019
Type of Mix	:	BC
Sample I/D	:	BC5

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	942	922
2. Weight of Mixture after extraction, g	893	874
3. Weight of Bitumen	49	48
4. Weight of filter paper before extraction, g	2,00	2,00
5. Weight of filter paper after extraction, g	4,10	4,00
6. Weight of fines, g	2,10	2,00
7. Weight of Bitumen & fines	51,10	50,00
8. Bitumen content in %	5,42	5,42
9. Average Bitumen content in %	**5,42**	
10. Minimum Bitumen content in %	**5,40**	

GRADATION FOR BC AFTER EXTRACTION

(As per MORTH & 500-18,Grading-2)

Sample Location:	At site		Date of Sampling:	31-12-2019	
			Date of testing:	31-12-2019	
Type of material & Purpose:	BC		Oven Dry Wt.(gms):	893.0	
IS Sieve size in mm	**Weight retained**	**Cummulative weight retained (gm)**	**Cummulative % of retained**	**Cummulative % of passing**	**Specification limits**
19.00	0	0	0.00	100.00	100.00
13.20	84	84.0	9.41	90.59	79 - 100
9.50	132	216.0	24.19	75.81	71 - 95
4.75	88	304.0	34.04	65.96	53 - 71
2.360	135	439.0	49.16	50.84	42 - 58
1.180	112	551.0	61.70	38.30	34 - 48
0.600	76	627.0	70.21	29.79	26 - 38
0.300	62	689.0	77.16	22.84	18 - 28
0.150	54	743.0	83.20	16.80	12 - 20
0.075	96	839.0	93.95	6.05	4 - 10
Pan	54.0	893.0			
Total	893.0				

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Name of Work	:	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	31-12-2019
Type of Mix	:	Tack coat
Sample I/D	:	8

DETERMINATION OF RATE OF SPREAD TACK COAT

Determination	**Unit**	**Test No**	
		1	**2**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.834	0.852
Final weight of plate after application of tack Coat (c)	Kg	0.857	0.875
Weight of tack Coat (d=c-b)	Kg	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.253	0.252
Average	Kg/sq.m	0.253	
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**	

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Project	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.R Ramshankar Reddy

FLAKINESS AND ELONGATION INDICES (IS 2386, PART 1)

Type of Material	BC		**Proposed Use**	**BC**
Sample Location	At plant		**Date of Sampling**	29-07-2019
			Date of Testing	29-07-2019

Size of aggregate		**Flakiness Index**		**Elongation Index**	
Passing through IS sieve, mm	**Retained on IS sieve, mm**	**Total wt. of aggregate retained on sieves (A) gms.**	**Wt. of aggregate passing from Flakiness gauge (B) gms**	**Wt. of aggregate retained on Flakiness gauge (C) gms**	**Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms**
63.0	50.0	0	0	0	0
50.0	40.0	0	0	0	0
40.0	31.5	0	0	0	0
31.5	25.0	0	0	0	0
25.0	20.0	0	0	0	0
20.0	16.0	932	86	944	62
16.0	12.5	1352	114	1242	128
12.5	10.0	520	76	442	70
10.0	6.3	496	64	422	60
Total		**3300**	**340**	**3050**	**320**

Note: Minimum 200 Pcs should be taken on each fraction of test

Flakiness Index(%):	10.30
Elongation Index(%):	10.49
Combined FI+EL (%)	20.79

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GRADATION FOR BC
(As per MORT&H 560-18,Grading-2)

Name of Work	:	Package-16.1. Construction of anganawadi building at [illegible] ward no:05 bytarayanapura sub division. 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Bytarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Bytarayanapura Sub division. 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Bytarayanapura Sub division.
Client	:	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant	:	M/s Tejus Consultants
Contractor	:	Sri.R.Ramshankar Reddy
Date of Testing	:	29.07.2020
Type of Mix	:	BC
Sample I/D	:	BC2

Sample Location:	At plant	Date of Sampling:	29.07.2020
Type of material & Purpose:	BC	Date of testing:	29.07.2020
		Oven Dry Wt.(gms):	1200.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	130	130.0	10.83	89.17	79 - 100
9.50	128	258.0	21.50	78.50	71 - 95
4.75	208	466.0	38.83	61.17	53 - 71
2.360	135	601.0	50.08	49.92	42 - 58
1.180	152	753.0	62.75	37.25	34 - 48
0.600	112	865.0	72.08	27.92	26 - 38
0.300	102	967.0	80.58	19.42	18 - 28
0.150	76	1043.0	86.92	13.08	12 - 20
0.075	50	1093.0	91.08	8.92	4 - 10
Pan	107.0	1200.0			
Total	1200.0				

Note:
1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory/Site.
3. Any Query regarding the report must be reported reported within 15days from the date of testing.

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Authorised Signatory

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GRADATION FOR BC
(As per MORT&H 500-18,Grading-2)

Name of Work	:	Package-10.1. Construction of anganawadi building at kodihalli in Ward No.05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.06 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant	:	M/s Tejus Consultants
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	29.07.2020
Type of Mix	:	BC
Sample I/D	:	BC2

Sample Location:	At plant	Date of Sampling:	29.07.2020	
Type of material & Purpose:	BC	Date of testing:	29.07.2020	
		Oven Dry Wt.(gms):	1200.0	

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	145	145.0	12.08	87.92	79 - 100
9.50	134	279.0	23.25	76.75	71 - 95
4.75	208	487.0	40.58	59.42	53 - 71
2.360	105	592.0	49.33	50.67	42 - 58
1.180	128	720.0	60.00	40.00	34 - 48
0.600	130	850.0	70.83	29.17	26 - 38
0.300	114	964.0	80.33	19.67	18 - 28
0.150	88	1052.0	87.67	12.33	12 - 20
0.075	50	1102.0	91.83	8.17	4 - 10
Pan	98.0	1200.0			
Total	1200.0				

Note:
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BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

Name of Work	:	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	29-07-2020
Type of Mix	:	BC
Sample I/D	:	BC3

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	940	928
2. Weight of Mixture after extraction, g	891	879
3. Weight of Bitumen	49	49
4. Weight of filter paper before extraction, g	2.00	2.14
5. Weight of filter paper after extraction, g	4.10	4.00
6. Weight of fines, g	2.10	1.86
7. Weight of Bitumen & fines	51.10	50.86
8. Bitumen content in %	5.44	5.48
9. Average Bitumen content in %	**5.46**	
10. Minimum Bitumen content in %	**5.40**	

GRADATION FOR BC AFTER EXTRACTION
(As per MORTH & 500-18,Grading-2)

Sample Location:	At site		Date of Sampling:	29-07-2020	
			Date of testing:	29-07-2020	
Type of material & Purpose:	BC		Oven Dry Wt.(gms):	891.0	
IS Sieve size in mm	**Weight retained**	**Cummulative weight retained (gm)**	**Cummulative % of retained**	**Cummulative % of passing**	**Specification limits**
19.00	0	0	**0.00**	**100.00**	**100.00**
13.20	82	82.0	9.20	90.80	79 - 100
9.50	136	218.0	24.47	75.53	71 - 95
4.75	94	312.0	35.02	64.98	53 - 71
2.360	148	460.0	51.63	48.37	42 - 58
1.180	102	562.0	63.08	36.92	34 - 48
0.600	78	640.0	71.83	28.17	26 - 38
0.300	62	702.0	78.79	21.21	18 - 28
0.150	50	752.0	84.40	15.60	12 - 20
0.075	96	848.0	95.17	4.83	4 - 10
Pan	43.0	43			
Total	891.0				

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BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

Name of Work	:	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	29-07-2020
Type of Mix	:	BC
Sample I/D	:	BC4

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	948	955
2. Weight of Mixture after extraction, g	898	905
3. Weight of Bitumen	50	50
4. Weight of filter paper before extraction, g	2.00	2.15
5. Weight of filter paper after extraction, g	4.10	4.00
6. Weight of fines, g	2.10	1.85
7. Weight of Bitumen & fines	52.10	51.85
8. Bitumen content in %	5.50	5.43
9. Average Bitumen content in %	**5.46**	
10. Minimum Bitumen content in %	**5.40**	

GRADATION FOR BC AFTER EXTRACTION
(As per MORTH & 500-18,Grading-2)

Sample Location:	At site	Date of Sampling:	**29-07-2020**
		Date of testing:	**29-07-2020**
Type of material & Purpose:	**BC**	Oven Dry Wt.(gms):	898.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	82	82.0	9.13	90.87	79 - 100
9.50	120	202.0	22.49	77.51	71 - 95
4.75	88	290.0	32.29	67.71	53 - 71
2.360	156	446.0	49.67	50.33	42 - 58
1.180	112	558.0	62.14	37.86	34 - 48
0.600	84	642.0	71.49	28.51	26 - 38
0.300	72	714.0	79.51	20.49	18 - 28
0.150	40	754.0	83.96	16.04	12 - 20
0.075	69	823.0	91.65	8.35	4 - 10
Pan	75.0	898.0			
Total	898.0				

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Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.R Ramshankar Reddy

AGGREGATE IMPACT VALUE (IS: 2386 Part - 4)

Proposed Use	BC	**Date of Sampling**	**29-07-2020**
Sample Location	At plant	**Date of Testing**	**29-07-2020**

Sl. No.	Description		Test No. 1	Test No. 2	Test No. 3	Spec Limit (%)
1	Wt. of stone pieces (dry) passing IS Sieve 12.5mm but retained in IS sieve 10mm (gm)	(Wa)	362.00	378.00	388.00	
2	Wt. of the fraction retained in IS sieve 2.36mm after the impact test (gm)	(Wb)	272.00	284.00	294.00	
3	Wt. of the fraction passed in IS sieve 2.36mm after the impact test (gm)	(Wc)	90.00	94.00	94.00	
4	Aggregate Impact Value (%)	(Wc/Wa)*100	24.86	24.87	24.23	
5	Average Aggregate impact value	(%)	24.65			Max - 30 %

Remarks : Satisfactory / Not Satisfactory

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Name of Work	:	Package-10.1. Construction of anganawadi building at kogilu in ward no05 bytarayanapura sub division, 2.Improvements of roads and drains at Ward No.05 to Ward No.06 and 07 connecting roads in Ward No.05 Byatarayanapura Sub Division. 3.Improvements to Roads and Drains at Telecom Layout Cross Roads in Ward No 05 Byatarayanapura Sub division, 4.Improvements to Roads and Drains at Shivaramakaranthanagara 1st stage cross roads in Ward No 05 Byatarayanapura Sub division.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.R Ramshankar Reddy
Date of Testing	:	29-07-2020
Type of Mix	:	Tack coat
Sample I/D	:	3

DETERMINATION OF RATE OF SPREAD TACK COAT

Determination	**Unit**	**Test No**	
		1	**2**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.834	0.845
Final weight of plate after application of tack Coat (c)	Kg	0.857	0.868
Weight of tack Coat (d=c-b)	Kg	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.252	0.256
Average	Kg/sq.m	0.254	
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**	

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